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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,672	12/31/2001	Takayuki Sugahara	0102/0192	5082

21395 7590 09/16/2005

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EXAMINER

EDWARDS, PATRICK L

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,672	Applicant(s) SUGAHARA ET AL	
	Examiner Patrick L. Edwards	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 5-8, 13, 14 and 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-12 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/31/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-4, 9-12, and 15-20 in the reply filed on 4 February 2005 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 9-12, and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 3, the claim recites "calculating a desired bit pattern represented by specified bits." The metes and bounds of this phrase are unclear as it is not clear how/why the desired bit pattern is represented by specified bits. Wouldn't the desired bit pattern be represented by desired bits?

Further, the metes and bounds of the phrase "wherein the desired bit pattern can be converted into the specified bit pattern by given logical operation with the predetermined bit pattern" are also unclear. The claim previously states that the desired bit pattern is represented by specified bits. So, how and why are a desired bit pattern converted into a specified bit pattern, if the desired bit pattern is already represented by specified bits? This simply doesn't make any sense. The examiner is unable to make a clear distinction between specified bits, desired bits, and predetermined bits (or predetermined bit patterns).

Claims 9, 12, 15, and 19 are also rejected along the same grounds as claims 1 and 3 above. The examiner is simply unable to make a clear distinction between the claimed predetermined bit pattern, specified bits, specified bit pattern, and desired bit pattern. As a result, it is not clear how all these elements interact with one another.

Referring to claims 9 and 12, there is no antecedent basis for the terms "specified bits" or "specified bit pattern" as used in lines 11 and 12 of claim 9 and lines 8 and 9 of claim 12.

Further referring to claims 9 and 12, there is no antecedent basis for the term "watermark data." The claim refers to a watermark-embedding position, but does not make any reference to watermark data.

Further referring to claims 9 and 12, the claim recites "embedding a result of the given logic operation." This is ambiguous because the claim refers to two different logic operations. One between the desired bit pattern, and the fixed bit pattern, and one between watermark data and the random-number data.

Further referring to claims 9 and 12, the metes and bounds of the final paragraph of the claim are unclear. The claim recites embedding in a second portion of the original picture data which corresponds to the watermark-embedding position and which adjoins the first portion of the original data. However, in the penultimate paragraph, the claim recites that a "first position of the original picture data which corresponds to the watermark embedding

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position." The problem here is clear. The second portion cannot correspond to both the watermark embedding position and adjoin the first portion, because the first portion also corresponds to the watermark embedding position. These conditions can not all coexist. If we say hypothetically that:

watermark-embedding position == A

first portion of the original picture data == B

second portion of the original picture data == C

The claim is then saying that $A = B$ and $A = C$, but that $C = B + 1$. This simply cannot be the case.

Claims 15 and 19 are rejected along the same grounds as claims 9 and 12 above.

Claims 2, 4, 10, 11, 16, 17, 18, and 20 are rejected because they depend from indefinite claims.

In view of the relatively egregious 112(2) problems associated with these claims, the examiner respectfully suggests that the applicant re-draft or substantially amend the claims such that the claims are more definite and a reasonable interpretation can be made.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

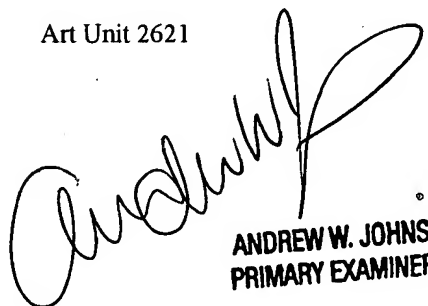
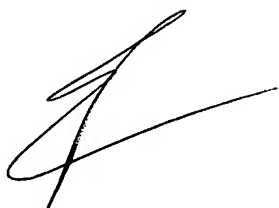
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

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ANDREW W. JOHNS
PRIMARY EXAMINER